

t1_seqfunc

(TMLbmkVnepeixYTxikGg7DCbWyFHHFbM9qV)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers (k4_partfun1 X0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k4_partfun1 X0 X1)))))) \Leftrightarrow ((k9_xtuple_0 X2 = k5_numbers) \wedge (\forall X3. (X3 \in k5_numbers) \Rightarrow ((v1_funct_1 (k1_funct_1 X2 X3)) \wedge (m1_subset_1 (k1_funct_1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))))) \quad (5)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (7)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_relat_1 \ X2) \wedge (v1_funct_1 \\ & X2)) \Rightarrow (((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ k5_numbers \ (k4_partfun1 \\ & X0 \ X1)) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \\ & (k4_partfun1 \ X0 \ X1)))))) \Leftrightarrow ((k9_xtuple_0 \ X2 = k5_numbers) \wedge (\forall X3. \\ & (m2_subset_1 \ X3 \ k1_numbers \ k5_numbers) \Rightarrow ((v1_funct_1 \ (k1_funct_1 \\ & X2 \ X3)) \wedge (m1_subset_1 \ (k1_funct_1 \ X2 \ X3) \ (k1_zfmisc_1 \ (k2_zfmisc_1 \\ & X0 \ X1))))))) \end{aligned}$$